IN THIS ISSUE: Special Interest Groups Up and Running!
It has been a long, cold winter, but that only means that NFARL has turned up the heat on activities. This month we focus on the CW and satellite Special Interest Groups and fill you in on club members’ participation in community events.

Summary of Upcoming Events and Dates

• **Every Sunday** – **NFARES net** - 8:30 PM - 147.06 MHz (+) PL 100
• **Every Monday** – **Tech Net** - 8:30 PM - 145.47 MHz (-) PL 100 - Check NFARL Nets website for “how to.”
• **Every Wednesday** – **Hungry Hams Lunch Bunch** - 11:15 AM - Slopes BBQ, 34 East Crossville Road, Roswell.
• **Third Tuesday** – **NFARL Club Meeting** – **February 18**, 7:30 PM - Alpharetta Adult Activity Center, 13450 Cogburn Road, Alpharetta. NFARL Library opens at 7:00 PM.
• **GIG-SIG Meeting** – Thursday, **February 20**, 6:00 PM to 9:00 PM - Community Room at the Kroger supermarket at the intersection of Johnson Ferry Road and Shallowford Road. Check NFARL website for details.
• **Dalton Hamfest** – Saturday, **February 22**, 8:00 AM to 2:00 PM. North Georgia Fairgrounds, 500 Legion Drive, Dalton. Talk-in: W4DRC 145.230 (-) PL 100 - Click here for details.
• **Fourth Tuesday** – **NFARL Executive Team Meeting** – **February 25**, 7:00 PM – Panera Bread, 1195 Woodstock Road, Roswell. Meetings are open to NFARL club members.
• **VE Testing Session** – **March 8**, 10:00 AM - Alpharetta Adult Activity Center, 13450 Cogburn Road, Alpharetta. (Second Saturday each month)
• **NFARES meeting** – **March 11**, 7:00 PM with dinner at 5:55 PM at the Brandon Hall School, 1701 Brandon Hall Drive, Sandy Springs. (Second Tuesday each month) Talk-in on the 147.06 Repeater.
**Program Update / Walt Woron, KJ4HE**

Clark Macaulay, WU4B, will tell us why “Life Is Too Short for QRO” at the NFARL monthly club meeting at 7:30 PM on Tuesday, February 18.

Clark (at right), was first licensed in 1961, but was inactive for many years while family and career consumed his time. On a chance trip to Dayton in 1994, he was introduced to the world of QRP operating and building, which reignited his interest in radio. He was also introduced to DX hunting. Since then, he has earned awards for DXCC QRP (135 countries), WAS QRP, and has acquired a growing stable of QRP radios and accessories.

Clark’s preferred mode is CW. Sometimes he operates QRO (100 watts) when chasing an all-time “new one” for DXCC, where he has 283 entities confirmed.

Clark is active in the Kennehoochee Amateur Radio Club, North Georgia QRP Club, and Southeastern DX Club, where he is also editor of the club bulletin. He is a member of QRP ARCI, ARRL and the Straight Key Century Club.

**President’s Corner / Neil Foster, N4FN**

To say the least, it has been an interesting few weeks, not only for ham radio but for most of us personally! I do not think anything can top the winter storm! While my friends in Colorado laugh at the problem we had, we are just not prepared for extremes like we had. My wife, Nancy, and I were about 3 miles from home when it hit. Two hours later, we still had not gotten home. By using some back roads, we did get home safely. That was not to be for many folks who were trapped by the severe weather. One of our members, Tim Lemmon, WK4U, was on the air helping stranded folks who had radios in their vehicles find safe ways home. Well done, Tim, and more on that at the meeting on February 18.

For the DXers, we had the FT5ZM folks on Amsterdam Island in the South Indian Ocean (really far south) with one of our local stalwarts Bob Allphin, K4UEE, as an operator. Activity-wise, we have the Special Interest Groups in full operation with 16 people signed up for the CW SIG. We had a great showing at TechFest and many folks enjoyed learning to solder and build their first kit. Those who participated had a great time. Coming up is the Atlanta Science Festival, March 22-29, and we are looking at options to take part. Wes Lamboley, W3WL, informed us that we are set
for HamJam 2014 at the Metropolitan Club again, thanks to the efforts of Wes and Jim Paine, N4SEC. It looks like we will be joined again in this venture by the Southeastern DX Club. April 26 brings us another HamCram at the Brandon Hall library. See the NFARL website for more information.

Program-wise, Walt Woron, KJ4HE, has all slots filled until June with excellent offerings. Just in, as of this writing, our young friends at Mill Springs Academy placed eighth in the "School Club Roundup," a job well done by Martha Muir, W4MSA, and her students. In addition to garnering this great accomplishment, the club boasts eight new hams with more to come. Martha is indeed the sparkplug for her students. The effort they have expended is something we can be proud of. Also, some of our merry madmen ventured to the Orlando HamCation, and I look forward to hearing about it. And, speaking of hamfests, on Saturday, February 22, we will have the Dalton Hamfest. It is always a well-attended affair. Dalton is the first local hamfest each year and one I look forward to.

At last month's meeting, we were joined by our friend from across the pond, Dr. Vito Leo, ON6VL, from Incourt, Belgium. Vito visits us several times a year and was able to join the Royal Order of the Olde Geezers (ROOG), a NFARL affiliate group, at its breakfast soirée. The group meets most Saturdays at Reveille Café at Sandy Plains and Shallowford Road at 9:00 AM.

I look forward to seeing you at our February 18 club meeting at the Alpharetta Senior Center. Our good friends and friendly competitors at the Gwinnett Amateur Radio Society (GARS) have been named Dayton Hamvention’s Club of the Year. Well done! However, after Field Day 2014, the ice cream is coming back to NFARL!

Field Day: Something Old, Something New

/ John Kludt, K4SQC, 2014 Field Day Chairman

ARRL Field Day is without a doubt the premier operating event of the year. For those of you new to amateur radio, the fourth full weekend in June each year finds individuals, groups and radio clubs packing up their gear and their power sources and heading out to the field for 24 hours of radiosport. NFARL has participated in this activity for some time and for the past several years has led the nation in participation; the number of
people we are able to turn out to visit our Field Day site as operators, kibitzers, guests, dignitaries and interested members of the community. Every year we debate the nature of Field Day and come up with something like “Field Day is a public service event where score is kept.” And then the competitive juices kick in! So this year NFARL is going to take a different approach:

“Field Day is a contest where you keep score and demonstrate emergency preparedness to the general public.”

How are things the same? We are again planning to be at Waller Park Extension. We want to emphasize participation and again lead the nation in that category. We want to continue working with the Boy Scouts as we have done in the past. The GOTA (Get On the Air) station has been hugely successful and we want to continue with that. We will again do the satellite activities. The food and camaraderie will continue to be a high point of the operations. We want to again operate a VHF station on 6 meters and maybe 2 meters.

How will things be a bit different? We are planning to run 3A (a club station, on generator power with three transmitters). The three transmitters will be used as follows:
Transmitter #1 Phone, Transmitter #2 CW;
Transmitter #3 Phone/CW/Digital as the opportunity presents itself for the best score.
To accomplish this kind of operation we will network the scoring computers so as to avoid “dupes.” A “dupe” occurs when the same station is worked on the same band with the same mode (phone/cw/digital) twice. We will make a real effort to pair experienced operators with less experienced operators so that all have a chance to learn as we build our score.

Our goal is to achieve at least 80 percent of the average score in the 3A category over the last five years. The “stretch goal” is to flat-out win 3A. We want to build on our strengths while at the same time bringing a new challenge to Field Day. As always, there is a role for everyone to play. Stay tuned as this new adventure unfolds.

Every year, we challenge the Gwinnett Amateur Radio Society, our cross-town rival and the 2014 Dayton Hamvention Club of the Year, to a friendly bet on some aspect of the Field Day process. Last year, alas, for the first time we had to take the prize (ice cream) to them. This year, we want the ice cream back!
Mill Springs Now Has 12 Licensed Students

/ Mike Cohen, AD4MC and Chuck Catledge, AE4CW

Ham Fever is growing at Mill Springs Academy! Under the leadership of MSA science teacher Martha Muir, W4MSA, 12 enthusiastic young hams have their licenses and more are on the way. Most are enrolled in Martha’s ACE (Academic Competition Enrichment) class which is completely dedicated to ham radio topics for the spring semester. NFARL members Jim Stafford, W4QO; Mike Cohen, AD4MC; John Kludt, K4SQC; and Chuck Catledge, AE4CW, are teaching Morse Code, Digital Modes, Satellite Communications plus Repeater and HF Operations with more to come. What a great opportunity to mentor a group of new young hams!

Student reaction has been amazing. One student wrote: “Dear Martha, I left Monday’s class with a Baofeng UV-B5 and will be entering tomorrow with the same … plus a Technician license!!! I just received the paper in the mail today. Can’t wait for what NFARL has to teach us next!”

Many NFARL members are helping the kids learn about ham radio, including: Tim Lemmon, WK4U; Cathy Freeman, K14SBK; Neil Foster, N4FN; Mike Birmingham, K4LJG; Keith Plossl, K4KRX; and Wes Lamboley, W3WL. How about joining the MSA team? Just contact Chuck, AE4CW.

New hams at Mill Springs Academy include: Front row (from left) Andrew, KK4WOF; Jack, KK4WPH; Tommy, KK4WOJ; Matthew, KK4WPJ; and back row (from left) Sammy, KK4WPI; Sagan, KK4WPW; Sam, KK4NVJ; Drew, KK4WOH; Trey, KK4QJB; and Parker, KK4WPK. Not shown are: Christian, (awaiting call sign) and Joseph, KK4NVI.

Need a Name Badge?

Go to NFARL Mart and order one of these magnetic badges!
**Sign Up for Tech HamCram / Bill Weathers, K4WSW**

Do you know a friend, neighbor or relative who is interested in ham radio but needs a little extra help to make the leap? Here is your opportunity to introduce them to a lifetime of learning, making new friends and just plain great fun!

NFARL, in cooperation with Brandon Hall School in Sandy Springs, will conduct a Technician HamCram on Saturday, April 26. The cost is $25 which includes a full day of classroom instruction, lunch, snacks, drinks and the FCC license examination. Make special note: Anyone passing the test will be offered a complimentary one-year NFARL membership. See additional information on the class and registration at NFARL HamCram link; the cutoff for enrollment is March 30.

A team of NFARL volunteer instructors will lead the students through a review of all that’s required to pass the FCC license exam. Each student will be provided with a free set of study materials plus recommendations for additional low-cost self-study guides.

You know how much you enjoy ham radio. How about encouraging someone you know to take advantage of this great opportunity to join the hobby!

---

**Winter Slump? Not for NFARL! / John Tramontanis, N4TOL**

At the GARS TechFest last month, NFARL was well represented as the club provided three impressive activities for the show.

Club members conducted a very successful beginner's kit build. Over 20 kits, LED blinking lights, were built by novice builders, who were given the chance to learn about soldering techniques and safety under the direction of a club team led by Chuck Catledge, AE4CW. Thanks to soldering tutors Tim Lemmon, WK4U; Mike Birmingham, K4LJG; Bill Cobb, K4YJJ; Wes Lamboley, W3WL; Karen Mallory, AK4TR; and Mike Roden, W5JR, for making this endeavor a winner.

Neil Foster, N4FN, had an impressive exhibit/presentation on Logbook of the World (LoTW) and the art of QSLing. This booth generated much interest and many questions on the methods, both old and new, that can be used to confirm amateur radio contacts of all modes and types.

A demonstration of some of the equipment and technology used to make contacts on amateur radio via satellite was given by John Kludt, K4SQC. This was a very informative presentation on this unique aspect of ham radio.

Also in January, club members participated in "Family Science Night" at Mimosa Elementary School in Roswell by presenting a program titled "Worldwide Wireless
Wizards" to the students and their parents. A brief overview was given to the attendees about amateur radio. The students were then given the opportunity to send their names in Morse Code, to view the video of Mills Springs Academy’s contact with the International Space Station and also the chance to make their own QSL card. All students (and some parents) who sent their name successfully in CW were given a personalized certificate for their accomplishment. There were many smiling faces, as the participants appeared to have a great time, as well as the NFARL volunteers. The NFARL team was led by Cathy Freeman, KI4SBK; Chuck Catledge, AE4CW; Tim Lemmon, WK4U; Wes Lamboley, W3WL; John Tramontanis, N4TOL; with support from Jim Stafford, W4QO; Mike Roden, W5JR; and Tom Koch, W4UOC.

For this month, you may want to mark your calendar for the Dalton Hamfest on February 22. This is a very nice hamfest to start off the season in Georgia and is typically well attended.

Bill Cobb, K4YJJ, and Mike Roden, W5JR, (on the left in left photo) pay close attention as newbie solderers young and old learn the finer points at TechFest in January. Chuck Catledge, AE4CW, (photo at right) introduces Mimosa Elementary School students to wireless wizards at “Family Science Night.” TechFest Photo / Bill Hampton, W4OO School Photo / Courtesy of Mimosa

**CW SIG Explores Digit Ham Radio / Jim Stafford, W4QO**

No, that’s not digital ham radio but DIGIT HAM RADIO! The earliest form of digital is DIGIT or CW! Using your digits (fingers) to communicate and yes, NFARL has a 2014 edition of its occasional CW Special Interest Group (SIG).

Sixteen people signed up originally but we’ve had some put it on the back burner and some new ones have joined along the way, so the total now is 20, give or take a few.

The way it works is what I call CW 101, in that the SIG is really self-paced. Each person studies and proceeds at their own pace. You, too, can join the CW SIG and get right with it. Just let me know (cw@w4qo.com) and I’ll send you the very limited material to get you going along with my philosophy of what to do and not do to be successful.
Sixteen signed up and 10 showed up for the “live” intro meeting at my QTH on January 22. And off they went. Using these suggestions/ideas/thoughts to learn Morse Code (CW):

1. Go to the CW SIG button on the nfarl.org website. Under that button are several paragraphs dealing with learning the code. Find the suggestions for software. My favorite is Just Learn Morse Code (JLMC). Download it and play the practice files from our club website. I’ve had Webmaster Bill Cobb, K4YJJ, put over 50 files of practice there including recently adding a zip of all the files to make for easy downloading.

2. Learn CW in bunches. Start with Group 1 – ESTONIA, followed by Group 2 – DR MULCH, etc. Use the Farnsworth method: Set the overall speed at 4 wpm but the character speed at 18 wpm. Do not use the Koch method (my problem is with the order of letters, not the actual method). So do not start with the letters K and M; instead use the ARRL order as in ETOANIS (ESTONIA). The reason? We want to get you on the air as soon as you know the first two groups PLUS your call sign. In fact, there is an iPhone app called Ham Morse that allows changing the order of letters within the Koch approach. I have several apps for iPhone and Android that work well; many do not. Ask me!

3. Join us every M-W-F for the next month or so as we send code practice at 8:00 PM for about half an hour on 145.47. This is a key part of the program - to do something with CW for a half hour a day! Either do code practice using JLMC, listen to code off the air from W1AW, or make a contact on the air. Sending is so important that I recommend 10 minutes sending for every 20 minutes listening. You can use your HF rig by turning the VOX off and using it as a $1,000 code practice oscillator! Learning with a paddle is fine but many like the straight key too, hence the popularity of the Straight Key Century Club (SKCC). I owe a special thanks to NFARL secretary Mike Birmingham, K4LJG, who is a newcomer to CW himself but who runs the “net” on Fridays. Mike has picked it up very quickly and has made quite a few contacts on HF CW.

4. Many of the M-W-F evenings, we connect via EchoLink to *W1AWBDCT* on the 145.47 repeater. You can also connect to the broadcast on 7047.5 kHz every evening at 7:00 PM and M-W-F starts with 5 wpm and goes on up.

5. Remember, CW is a language with only 45 words! WE SPELL EVERYTHING! So no, it is not difficult. You become good at it the same way you get to Carnegie Hall – PRACTICE, PRACTICE, PRACTICE! The SIG also tries to make contact on the NFARL “frequency” of 7117 kHz. Join us. In fact, most of the SIG members have buddies or mentors to get on their and work each other. Several contacts have been made already and QSLs exchanged. We get on there many evenings after the on-the-air practice.

So, who are these folks in the CW SIG? For the most part, they are hams who got their license after the requirement to pass CW was dropped. Are they crazy or something? No, just as there are many traditions in ham radio, CW is simply one of them. And, some are “old” timers who want to return to the thrill they experienced when they got
their first license. Some want to use it with CW-only QRP rigs. Whatever the reason, they all want to either learn CW or improve their speed. You can too!

**LATE NEWS!** Guess who the new folks are who joined the CW SIG? The Academic Competition Enrichment class at Mill Springs Academy! Ten students are now learning CW and will soon be building CPOs for that sending practice! Young folks learn CW fast and enjoy it! Soon, expect some to be on HF CW!

---

**Satellite SIG Flying High / John Kludt, K4SQC**

Twelve NFARL members are engaged in various phases of learning the ropes for working the amateur radio satellites. It is great time to be involved as, after years of dwindling numbers of operational satellites, a bevy of new “birds” has taken to the airways. While only 10 cm on a side, the new class of “cubesats” are proving to be very useful to the amateur radio and educational communities.

Working SO-50, the current operational FM satellite, has risen to the top of the queue as a goal of the group. Dual-band HTs have been programmed and we are “kitting” (that is, assembling the necessary parts) a homebrew version of the Arrow antenna and diplexer (that’s right: *diplexer* not *duplexer*). Most dual band HTs have a single antenna output for both 2 meters and 440 MHz. An Arrow-like antenna is a 2 meter and 440 antenna placed on the same boom, each with its own feed. The purpose of the *diplexer* is to send the transmitted RF to the correct antenna.

We will be working on satellite basics. Software plays a simplifying role in satellite operations and we will be looking at the various options for CAT control of Doppler correction and antenna aiming. Doppler correction? Both the uplink and the downlink frequency change as the satellite approaches and recedes. In the bad old days we had to do that by hand – and I, for one, never had enough hands. Now a computer can do that as well as drive the antenna, so all I have to do is look for people to talk to. Pretty cool!

As noted elsewhere in this newsletter, NFARL has a new approach and goal for Field Day. Maybe less known is that there is also an AMSAT (Amateur Satellite Corporation – the folks who build and launch these satellites) sponsored Field Day the same weekend and with very similar rules. Each satellite is considered a different band and each station can be worked once per “band” and mode. We are only allowed one FM contact per satellite. However, CW contacts are worth *three* points per contact not the usual *two*. There are even points for a digital contact through the ISS. This group will be working toward developing the expertise to make sure that an operator is available for every pass and that we make as many contacts as possible. Sure would be nice to see K4JJ in the top three for AMSAT Field Day! And that is what this group is going to do!

We meet when we can – life has a funny way of messing up the best-planned ham radio activities! If you are interested in some aspects of satellite operations, please contact [John K4SQC](mailto:JohnK4SQC@hamradio.com)
## Contact Us

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Neil Foster, N4FN</td>
<td>770-321-9348</td>
<td><a href="mailto:President@nfarl.org">President@nfarl.org</a></td>
</tr>
<tr>
<td>Vice President and Program Chairman</td>
<td>Walt Woron, KJ4HE</td>
<td></td>
<td><a href="mailto:VicePresident@nfarl.org">VicePresident@nfarl.org</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Mike Birmingham, K4LJG</td>
<td></td>
<td><a href="mailto:Secretary@nfarl.org">Secretary@nfarl.org</a></td>
</tr>
<tr>
<td>Treasurer and Repeater Trustee</td>
<td>Fred Moore, N4CLA</td>
<td>404-434-4499</td>
<td><a href="mailto:Treasurer@nfarl.org">Treasurer@nfarl.org</a></td>
</tr>
<tr>
<td>Past President</td>
<td>John Kludt, K4SQC</td>
<td>770-891-8091</td>
<td><a href="mailto:PastPresident@nfarl.org">PastPresident@nfarl.org</a></td>
</tr>
<tr>
<td>Activities Chairman</td>
<td>John Tramontanis, N4TOL</td>
<td></td>
<td><a href="mailto:Activities@nfarl.org">Activities@nfarl.org</a></td>
</tr>
<tr>
<td>Membership Chairman and HamCram</td>
<td>Bill Weathers, K4WSW</td>
<td></td>
<td><a href="mailto:Membership@nfarl.org">Membership@nfarl.org</a>, <a href="mailto:HamCram@nfarl.org">HamCram@nfarl.org</a></td>
</tr>
<tr>
<td>Mentors/Elmers</td>
<td>Chuck Catledge, AE4CW</td>
<td>770-641-7729</td>
<td><a href="mailto:Elmers@nfarl.org">Elmers@nfarl.org</a></td>
</tr>
<tr>
<td>Field Day Chairman</td>
<td>John Kludt, K4SQC</td>
<td>770-891-8091</td>
<td><a href="mailto:k4sqc@nfarl.org">k4sqc@nfarl.org</a></td>
</tr>
<tr>
<td>Scout Coordinator</td>
<td>Jon Wittlin, K4WIT</td>
<td></td>
<td><a href="mailto:k4wit@nfarl.org">k4wit@nfarl.org</a></td>
</tr>
<tr>
<td>ARES Liaison and Community Relations</td>
<td>Jim Paine, N4SEC</td>
<td>770-475-4454</td>
<td><a href="mailto:n4sec@nfarl.org">n4sec@nfarl.org</a></td>
</tr>
<tr>
<td>Repeater Operations</td>
<td>Mike Roden, W5JR</td>
<td>404-781-9494</td>
<td><a href="mailto:Repeaters@nfarl.org">Repeaters@nfarl.org</a></td>
</tr>
<tr>
<td>Web Master</td>
<td>Bill Cobb, K4YJJ</td>
<td>770-396-5007</td>
<td><a href="mailto:Webmaster@nfarl.org">Webmaster@nfarl.org</a></td>
</tr>
<tr>
<td>NFARL eNEWS Publisher</td>
<td>Bill Reed, K4YJI</td>
<td>770-993-5758</td>
<td><a href="mailto:k4yji@nfarl.org">k4yji@nfarl.org</a></td>
</tr>
<tr>
<td>NFARL eNEWS Editor</td>
<td>Jim Smith, W4JDS</td>
<td>404-406-6330</td>
<td><a href="mailto:Editor@nfarl.org">Editor@nfarl.org</a></td>
</tr>
</tbody>
</table>
### Club Repeaters

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Mode</th>
<th>Genset</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>145.470 (-)</td>
<td>100 Hz</td>
<td>100 Hz</td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>EchoLink Node 560686</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NF4GA-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>147.060 (+)</td>
<td>100 Hz</td>
<td>100 Hz</td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>Primary ARES repeater</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>224.620 (-)</td>
<td>100 Hz</td>
<td>100 Hz</td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>Joint Venture with the MATPARC club</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>443.150 (+)</td>
<td>No Tone</td>
<td></td>
<td>Roswell Water Tower</td>
</tr>
<tr>
<td>444.475 (+)</td>
<td>100 Hz</td>
<td></td>
<td>Sweat Mountain</td>
</tr>
<tr>
<td>927.0125 (-)</td>
<td>146.2 Hz</td>
<td></td>
<td>Sweat Mountain</td>
</tr>
</tbody>
</table>

Click any of the logos below to visit our NFARL supporters and affiliates.